

JC12 Res'd PCT/PTO

19 SEP 2001

## SUBSTITUTE SPECIFICATION

09/936995

### DIGITAL SIGNAL TRANSMISSION SYSTEM FOR BUILDINGS SYSTEMS ENGINEERING

[0001] This application is the national phase under 35 U.S.C. § 371 of PCT International Application No. PCT/DE00/00696 which has an International filing date of March 6, 2000, which designated the United States of America, the entire contents of which are hereby incorporated by reference.

#### Field of the Invention

[0002] The invention generally relates to a digital signal transmission system, for buildings systems engineering, for information messages. More preferably, it relates to such a system in which user appliances, for example having the generic function of actuator and/or sensor and/or evaluation unit, can be connected to a bus using coupling elements which have interfaces.

#### Background of the Invention

[0003] In a known system, user appliances are connected to the bus using bus couplers (EP-B-0 365 696). Such a bus coupler has components for physical connection to the bus and for transmitting information messages. It also has components for communication and for user-related intelligence. "User appliances" or terminals can then be connected thereto. In this context, one bus coupler with comprehensive functions is provided per connection point.

[0004] On the basis of another known digital signal transmission system for corresponding terminals, universal interfaces independent of function are used which, together with the bus, are part of the basic installation. These universal interfaces have external function-determining appliance adapters attached to them, which accordingly need to be made available with extensive functions.

#### SUMMARY OF THE INVENTION

[0005] The invention is based on the object of developing a digital signal transmission system for buildings systems engineering which requires permanent or extensive functions neither on the part of the user nor on the bus.

[0006] The object outlined above, and/or other objects, is achieved by a digital signal transmission system for buildings systems engineering in accordance with claim 1. In this context, the coupling element is provided with a number of permanent functions for user appliances, e.g. switching, and associated connection slots for user appliances. The coupling

OK to  
4/16/04

09/936995-091901